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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,920	11/06/2001	Nicholas V. Nechitailo	A8023	4569

7590 12/19/2002

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EXAMINER
SUCHECKI, KRYSTYNA

ART UNIT	PAPER NUMBER
2882	

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/985,920	Applicant(s) NECHITAILO, NICHOLAS V.
	Examiner Krystyna Suchecki	Art Unit 2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 November 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. Figures 1a-1b should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because items 14 and 16 are not distinguished by their titles or descriptions. Item 14 appears to indicate loose fibers housed within a partition, yet they are called "a bundle of optic fibers". The description implies that optic fibers are bundled, as in somehow bound together. This is conflicting and unclear. Item 16 appears to be a bundle of optic fibers, yet is described as "fiber ribbons". It is unclear from the drawings how the fibers are disposed as ribbons. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-4, 7-8, 10-11, 13-14, 16-17, 20-22, 24 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagman et al. (US 5,517,591)

5. Regarding Claim 1, Wagman teaches a fiber cable comprising:

a. A jacket having an interior jacket surface and an exterior jacket surface (Figure 1, item 15);

b. A core element centrally disposed within the jacket (Figure 1, item 11); and

c. A plurality of partitions extending from said core element to said interior surface of said jacket in a skewed direction, wherein said partitions form a plurality of buffer cells (Columns 1-2; and Figure 1, items 12 and 27).

6. Regarding Claim 14, Wagman teaches a fiber cable comprising:

d. A jacket having an interior jacket surface and an exterior jacket surface (Figure 1, item 15);

e. A core element centrally disposed within the jacket (Figure 1, item 11); and

f. A plurality of partitions extending from said core element to said interior surface of said jacket wherein said partitions are located at an angle with respect to a radial line extending from said core element thereby forming at least one buffer cell (Columns 1-2).

7. Regarding Claims 3 and 16, Wagman teaches a plurality of fiber ribbons housed in at least one of said buffer cells (Column 5, lines 39-51).

8. Regarding Claims 4 and 17, Wagman teaches an optic fiber housed in at least one of said buffer cells (Column 5, line 41).

9. Regarding Claims 7 and 20, Wagamn teaches water swellable tape housed in at least one of said buffer cells (Column 3, lines 46-50).

10. Regarding Claims 8 and 21, Wagman teaches a plurality of flat ribbons housed in at least one of said buffer cells (Figure 1, item 13).

11. Regarding Claims 10 and 22, Wagman teaches at least one buffer tube (item 13) housed in at least one of said buffer cells (Figure 2).

12. Regarding Claims 11 and 24, Wagman teaches the partitions as operably configured to provide protection of the fiber ribbons against crushing forces applied to the fiber optic cable (Column 1).

13. Regarding Claims 13 and 26, Wagman inherently teaches a cable wherein the skewed partitions deform without breaking or collapsing (Figure 1). Because the Wagman reference teaches the use of the same slotted core, it is inherent that the same slotted core will have the same properties such as resistance to breaking and collapsing during deformation. (See *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980)).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 2 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagman in view of Rutterman et al. (US 6,449,412).

16. Regarding Claims 2 and 15, Wagman teaches a slotted core cable in claims 1 and 14 above, but fails to explicitly teach a non-flat or arched ribbon housed in at least one of said buffer cells.

17. Rutterman teaches the use of a slotted core cable (Column 4, lines 46-48) wherein non-flat fiber ribbons (Figures 1-4 and 6, items 10) are housed. Figure 6 shows non-flat, or arched, ribbons housed within buffer cells (items 92), and it is known in the art that slotted core cables as mentioned in Rutterman would have a similar use of buffer cells. Buffer material is placed around the fiber ribbon and jacketed in a general place about the fiber ribbon, thus making a non-flat ribbon, for the purpose of inhibiting stress to the optical part of the ribbon (Column 1, lines 51-65 and Column 3).

18. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include non-flat or arched ribbons in the slotted core cable of Wagman, as taught by Rutterman for the purpose of inhibiting stress to the optical part of the ribbon (Rutterman, Column 1, lines 51-65 and Column 3).

19. Claims 5, 6, 9, 18-19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagman in view of Coleman (US 6,052,502).

20. Regarding Claims 5, 9, 18 and 23, Wagman teaches Claims 1 and 14 above, but fails to teach a soft cushion or strength yarn housed in at least one of said buffer cells.

21. Coleman teaches a cushioning and strength yarn material housed in at least one buffer cell of a slotted core cable (Item 15) for the purpose of providing support and cushioning as cable tensions are experienced (Columns 3-4).

22. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a cushioning or strength yarn material in the slotted core cable of

Wagman as taught by Coleman for the purpose of providing support and cushioning as cable tensions are experienced (Coleman, Columns 3-4).

23. Regarding Claims 6 and 19, Wagman teaches Claim 1 above, but fails to teach a ripcord housed in at least one of said buffer cells.

24. Coleman teaches a ripcord (19) disposed along an inner surface of a tape material (20), understood to mean the ripcord can be housed in at least one of said buffer cells of Coleman's slotted core cable (Column 3, lines 44-46). It is understood in the art to include a ripcord in a cable for the purpose of allowing quick access to the contents of a cable without having to cut the cable along a lengthwise dimension.

25. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a ripcord within the buffer cell of Wagman's slotted core cable as taught by Coleman for the purpose of allowing quick access to the contents of a cable without having to cut the cable along a lengthwise dimension.

26. Claims 12 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wagman in view of Patel (US 5,166,998).

27. Regarding Claims 12 and 25, Wagman teaches claims 1 and 14 above, and also teaches striped partitions of a slotted core cable for slot identification (Column 5, lines 49-51).

28. Wagman does not explicitly teach the partitions as color coded.

29. Patel teaches colored indicia on optical fibers for identification of optical fibers in slotted core cables (Column 1 and Figures 2-3). Patel also indicates the need in the art to have greater ability to identify fiber groups in cable systems (Column 1).

30. It would have been obvious to one of ordinary skill in the art at the time the invention was made to extend the striping of Wagman (Wagman, Column 5, lines 49-51) to more than one partition and to ensure color coding as taught by Patel (Patel, Column 1 and Figures 2-3) in order to increase the ability in the art to identify optical fibers and fiber groups in a slotted core cable (Patel, Column 1).

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patent to Huber (US 4,952,020) indicates an alternative fiber ribbon. Patent to Arroyo et al. (US 4,807,962) indicates loose fibers in a slotted core cable (Figures 3-4) as well as a differing fibers housed in adjacent slots.

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krystyna Suchecki whose telephone number is (703) 305-5424. The examiner can normally be reached on M-F 8-6, with alternating Fridays off.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

34. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

ks
December 16, 2002

ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
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